

MAGNETIC PROPERTIES OF CORROSION & TEMPERATURE STABLE SERIES (20°C)

version Dec 2025

Grade	Remanence		Normal coercivity		Intrinsic coercivity	Energy density		Temperature coefficient				Max. operating temp. °C
	Br mT		Hcb kA/m		Hcj kA/m	BH(max) kJ/m3		20~100℃		20~150℃		
	min	typ	min	typ	min	min	typ	Tc(Br) typ	Tc(Hcj) typ	Tc(Br) typ	Tc(Hcj) typ	
N45M/ST	1330	1370	1003	1033	1194	338	358	0,12	0,72			100
N48M/ST	1370	1410	1033	1064	1194	358	380	0,12	0,72			100
N50M/ST	1390	1430	1048	1079	1194	366	387	0,12	0,72			100
N52M/ST	1420	1450	1071	1094	1194	382	398	0,12	0,72			100
N54M/ST	1440	1470	1091	1114	1194	393	409	0,12	0,72			100
N56M/ST	1460	1490	1091	1104	1114	404	421	0,12	0,72			100
N58M/ST	1475	1500	1091	1104	1114	412	426	0,12	0,72			100
N30H/ST	1080	1120	819	849	1433	220	237	0,12	0,66	0,12	0,60	120
N33H/ST	1140	1170	864	887	1433	246	259	0,12	0,66	0,12	0,60	120
N35H/ST	1170	1220	887	925	1433	259	281	0,12	0,66	0,12	0,60	120
N38H/ST	1220	1260	925	955	1433	281	300	0,12	0,66	0,12	0,60	120
N40H/ST	1260	1300	955	985	1433	300	319	0,12	0,66	0,12	0,60	120
N42H/ST	1300	1330	985	1008	1433	323	338	0,12	0,66	0,12	0,60	120
N44H/ST	1320	1350	1000	1023	1433	333	348	0,12	0,66	0,12	0,60	120
N46H/ST	1350	1380	1023	1046	1433	348	364	0,12	0,66	0,12	0,60	120
N48H/ST	1370	1410	1038	1069	1433	358	380	0,12	0,66	0,12	0,60	120
N50H/ST	1390	1430	1053	1084	1433	368	389	0,12	0,66	0,12	0,60	120
N52H/ST	1420	1450	1076	1099	1433	384	400	0,12	0,66	0,12	0,60	120
N54H/ST	1440	1470	1091	1114	1433	395	411	0,12	0,66	0,12	0,60	120
N56H/ST	1460	1490	1107	1129	1433	406	423	0,12	0,66	0,12	0,60	120
N30SH/ST	1080	1120	822	853	1672	220	237	0,115	0,62	0,12	0,56	150
N33SH/ST	1140	1170	868	891	1672	246	259	0,115	0,62	0,12	0,56	150
N35SH/ST	1170	1220	891	929	1672	259	281	0,115	0,62	0,12	0,56	150
N38SH/ST	1220	1260	929	959	1672	281	300	0,115	0,62	0,12	0,56	150
N40SH/ST	1260	1300	959	990	1672	300	319	0,115	0,62	0,12	0,56	150
N42SH/ST	1300	1330	990	1013	1672	323	338	0,115	0,62	0,12	0,56	150
N44SH/ST	1320	1350	1005	1028	1672	333	348	0,115	0,62	0,12	0,56	150
N46SH/ST	1350	1380	1028	1051	1672	348	364	0,115	0,62	0,12	0,56	150
N48SH/ST	1370	1410	1043	1074	1672	358	380	0,115	0,62	0,12	0,56	150
N50SH/ST	1390	1430	1058	1089	1672	370	391	0,115	0,62	0,12	0,56	150
N52SH/ST	1420	1450	1081	1104	1672	386	402	0,115	0,62	0,12	0,56	150
N54SH/ST*	1440	1470	1097	1119	1672	397	413	0,115	0,62	0,12	0,56	150
N28UH/ST	1040	1080	796	826	2070	204	220	0,110	0,58	0,115	0,52	180
N30UH/ST	1080	1120	826	857	2070	220	237	0,110	0,58	0,115	0,52	180
N33UH/ST	1140	1170	872	895	2070	246	259	0,110	0,58	0,115	0,52	180
N35UH/ST	1170	1220	895	934	2070	259	281	0,110	0,58	0,115	0,52	180
N38UH/ST	1220	1260	934	964	2070	281	300	0,110	0,58	0,115	0,52	180
N40UH/ST	1260	1300	964	995	2070	300	319	0,110	0,58	0,115	0,52	180
N42UH/ST	1300	1330	995	1018	2070	323	338	0,110	0,58	0,115	0,52	180
N44UH/ST	1320	1350	1010	1033	2070	333	348	0,110	0,58	0,115	0,52	180
N46UH/ST	1350	1380	1033	1056	2070	348	364	0,110	0,58	0,115	0,52	180
N48UH/ST*	1370	1410	1048	1079	2070	358	380	0,110	0,58	0,115	0,52	180
N28EH/ST	1040	1080	796	826	2468	204	220	0,105	0,54	0,110	0,48	200
N30EH/ST	1080	1120	826	857	2468	220	237	0,105	0,54	0,110	0,48	200
N33EH/ST	1140	1170	872	895	2468	246	259	0,105	0,54	0,110	0,48	200
N35EH/ST	1170	1220	895	934	2468	259	281	0,105	0,54	0,110	0,48	200
N38EH/ST	1220	1260	934	964	2468	281	300	0,105	0,54	0,110	0,48	200
N40EH/ST	1260	1300	964	995	2468	300	319	0,105	0,54	0,110	0,48	200
N42EH/ST	1300	1330	995	1018	2468	323	338	0,105	0,54	0,110	0,48	200
N44EH/ST*	1320	1350	1010	1033	2468	333	348	0,105	0,54	0,110	0,48	200
N28AH/ST	1040	1080	796	826	2866	204	220	0,105	0,50	0,110	0,45	220
N30AH/ST	1080	1120	826	857	2866	220	237	0,105	0,50	0,110	0,45	220
N33AH/ST	1140	1170	872	895	2866	246	259	0,105	0,50	0,110	0,45	220
N35AH/ST*	1170	1220	895	934	2866	259	281	0,105	0,50	0,110	0,45	220

- Remark:
- 1) The max working temperature is only for reference, is depended on the circuit the magnet is operating in.
 - 2) Customers are recommended to consult us on application involving temperature near to max working temperature.
 - 3) When $B/\mu_0 \cdot H=1$, the magnet is operated at mentioned max. working temperature, the irreversible losses less than 5% is guaranteed.
 - 4) /S means corrosion stable material, weight loss after 7 days PCT less than 3mg/cm².
 - 5) /ST means corrosion stable material + thermal stable material (with defined Hcj value at high temp.) Weight loss after 7 days PCT less than 3mg/cm².
 - 6) * is under development.

Important notice: Dimensions and shape of the magnet, in combination with required manufacturing processes, may cause the magnetic and physical characteristics to vary from typical values. Therefore, all data presented in this document are for general reference only and should not be relied upon to represent standard characteristics, nor are they guaranteed upon use. Bakker Magnetics reserves the right to change information in this document, including magnet performance standards, specifications, and characteristics without notice.